FORMER MARINE CORPS AIR STATION

EL TORO

PUBLIC MEETING

JULY 27, 2005

6:30 P.M.

ORIGINAL

PROPOSED PLAN

FOR

NO FURTHER ACTION

OPERABLE UNIT 2A SITE 24 VOC SOURCE AREA

IRVINE CITY HALL

IRVINE, CALIFORNIA

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PUBLIC MEETING

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MR. ANDY PISZKIN: My name is Andy Piszkin. I'm the BRAC Environmental Coordinator for the Marine Corps Air Station El Toro. I guess the former Marine Corps Station El Toro.

Tonight we are holding the formal public comment period meeting to take comments and questions on the Navy's Proposed Remedial Action Plan for the soils at Site 24, which is the Volatile Organic Compound Source Area, better known as Site 24.

A little bit about the program. We had a little bit of a good meet-and-greet for the last 15 minutes. Most of the people are being paid to be here and have name tags on from the Navy, the consultants, your state representatives from DTSC, Department of Toxic Substances Control, as well as your federal representative from the U.S. Environmental Protection Agency; they are also in the room.

We're going to have a formal presentation on the Proposed Plan with a little historical aspect of the site, because we have done some action there. And then we'll have more of a formal public comment-and-question session at the end.

There's a handout, pretty much for our Restoration Advisory Board meeting that is going to follow this meeting at 7:45, that identifies the location where you will get additional information to review the Navy's Proposed Remedial Action Plan at Heritage Park Library in Irvine, as well as the Administrative Record File that is located in Building 307 on former Marine Corps Air Station El Toro.

So this is the handout. I don't have an overhead of this, but it's on the table over there.

If you haven't signed in, please do so before you leave. And since we are having a Restoration Advisory Board afterwards, that's a separate sign-in sheet. So if you would sign in, we'd appreciate that.

When submitting comments, there is a variety of ways to do it. It all needs to be done by -- I think it's the 12th of August. And you would submit them to me or you can e-mail them to Content Arnold, since I am kind of living in a different location at the moment. We want to make sure they get to the Navy.

There is a form you can use, if you want to write down some questions and submit it in this comment box here, to make sure it gets locked in. Don't hand it to me or don't hand it to somebody else in the Navy, because we want to ensure that it does get submitted.

We have Laura over here, the court reporter. This is an official meeting for comments. If you don't want to have an oral comment at the comment-and-question period, you can sit over here and present your comment to Laura for the official record. And I think that's it.

If you did not get a mailing for the Proposed Plan, it's a pretty quick read. It's pretty much just a few pages. If you don't have one, there should be one on the handout table, because it is what we're here for.

It's really a success story. It's good news. Often you have a proposed remedial action and it's "Here is what we're going to do to a site." This one is, "We've already done something to this site and we are here to say there is No Further Action. We have remediated this site, and we have that support from both your state and federal representatives." So that's really positive.

I'm going to start the presentation, and Jeff Stanek over here is going to do the second portion. He's a consultant with Earth Tech. Earth Tech played a major role in the remediation of the soils at the VOC source area at El Toro.

I guess I need to start. Does anybody have any questions before I get going? If you do have questions,

if there are clarifications, go ahead and ask them during the meeting. This is not a hearing. I would like to have more of a discussion about the site and about what we are proposing, No Further Action, and then kind of cut off the discussion. And if there's formal comment and questions, we can do that afterwards. So I want to be fairly relaxed about this.

Let's go ahead. Go to the second one.

The purpose of the meeting, as you can read, is to involve the public in our proposed action. We've been involved with the public at El Toro for probably over ten years with the Restoration Advisory Board. We have held numerous presentations. We have had field visits. We've had lots of interface with the public. And this is kind of the formability of all that hard work that the Marine Corps and the Navy and our consultants and the regulatory agencies have done through the years.

We're going to go through a little bit of the history. I said what our goals were, beginning back in 1997, when we were talking to you with a Proposed Plan the first time at this site.

And then we will solicit questions and comments.

A little bit of the Super fund program,

basically kind of an acronym for the Superfund sites. We were put on the National Priorities List back in the '90s, because of this Volatile Organic Compound that had leaked into the soil, migrated to the groundwater on-Station and created about a one mile wide by three mile wide, fairly low, concentration level plumes out in Irvine.

This site is the reason we were put on that NPL list -- or the NPL. We are also signed up with a Federal Facility Agreement, pretty much the same year, later that year, with signators from the Navy on behalf of the Marine Corps; the Department of Health Services, at that time for the State of California, which is now really the Department of Toxic Substances Control; the Santa Ana Regional Water Control Board; and the U.S. EPA. That agreement is legally binding and that is pretty much how we managed the program.

The program in essence -- you can read this stuff, there's a handout -- I don't know if we have a handout -- there is a handout of the presentation.

First thing you do at a site is you assess if there was a release. And if there was a release, what is the nature and extent. That's provided in the Remedial Investigation Report.

In that report there is also a risk assessment

that says if there is a release and it's above groundwater, maybe there is some action that needs to be taken. Let's do a risk assessment to see if action is truly warranted.

If action is truly warranted, then you need to say, "What can we do about it?" That's the feasibility study. What alternative would resolve the concern and reduce the risk and abide by the laws of the State of California and the federal level?

So that feasibility study is where you have alternatives that are evaluated. And from those evaluations the responsible party, on this behalf it's the Navy, would look at those alternatives and propose one and have kind of basically an executive summary of the program in a Proposed Plan. Go to the public and say, "We've done all this work. We've done nature and extent. We've done evaluation of risk. We've looked at alternatives. How can we resolve this issue?" And we have a recommendation. And we want the public to comment on it.

And that is the stage we are kind of at, the second time around for this site.

And then we look at the comments. We put a responsiveness summary together, put in a record of decision, and all the parties of that Federal Facility

Agreement sign it and say, "This is legally what you will be doing."

Once we do that, we do a design based on that, those goals, those Remedial Action Objectives. And then we execute it. We construct what we need to construct. We dig what we need to dig up. And then we close the site.

Site location. Let's see, it's about a 200-acre location. It was kind of the industrial quadrant of El Toro. We did a lot of degreasing of aircraft, working with solvents, which was pretty typical in that area. And this is basically two plumes. This is kind of shallow groundwater and this is the deeper aquifer.

And the next slide, which is a block diagram -- I must give credit to Irvine Ranch Water District, I took this off of their website. That's okay, they probably took it from us. But I officially -- with Laura here, I better fess up. But it is kind of like the greatest presentation. Because this groundwater got us on the NPL in the first place. This is the culprit which is our activities in the industrial area, some solvents got in this soil called the Vadose Zone. And you might be able to read this, it's like zero to 100 feet, roughly.

Good news and bad news. The bad news is, these things were released into the soil, got into the groundwater. Part of the good news is, there is an aquifer below it that didn't allow it to go into kind of the principal aquifer right away.

Most of the 1990s had the local water districts, Irvine Ranch and Orange County Water Districts, and the Navy negotiating a joint project called the Irvine Desalter Project to resolve the concern about this contaminated groundwater.

While it was going on, we already knew we had plenty of contamination in the soil and there is only a few known effective solutions to getting that out. We went to an interim Proposed Plan and an interim Record of Decision, because we're not going to disrupt the negotiations on the groundwater. We didn't want to wait for the negotiations of the groundwater. "Let's go get the source out while the parties continue to negotiate an implementable(sic) solution for the groundwater."

So we did an interim -- go back just one. That's a description of southwest quadrant. Industrial activities. Don't know the precise origin of the solvents. VOC eventually reached groundwater.

Next slide.

MR. DON ZWEIFEL: Andy, I can tell you. I was here,

I was on the base at the time. I know the origin of the solvents. And I think we discussed that once before and -- there are employees that I've interfaced with over the years.

And we go way back, predate '94. Way back, '88.

MR. ANDY PISZKIN: I'm not as old as you, Don.

MR. DON ZWEIFEL: Older than God, yes.

As you know, we talked with several employees that were on the site and they did --

MR. ANDY PISZKIN: I am not saying the specific origin, did Bill Smith kick over a can or did Bill Smith -- sorry if there's a Bill Smith in the house -- if there's an Andy Piszkin who used degreasing materials to wash down aircraft or to clean parts or something. Specifically we don't know, if we pulled a molecule of VOCs out of the groundwater, did that come from degreasing, was that an accidental spill, was that something that was waste, was it a supply, a drum or something like that. That's the understanding, we don't know the origin of exactly what contamination is in the groundwater and where it actually came from.

So thanks, Don.

Next slide. The remedial investigation. Lots of soil gas samples. Let me see if I can get my notes

with that. Basically we did a lot of work. We polluted this site with information, gathered a lot of data, enough that we knew what it would take to resolve the contamination in the soil.

Next we have got the depth. It does not pose a risk to human health, the VOCs in soil. The groundwater, it was elevated and it was because of that trickle down migration from the contaminated soil, contaminated groundwater.

Go ahead. And this is where I get back to what you can do about it. Soil vapor extraction, I was reminded today by the Water Board, is the most effective known remedy to pull contamination out of soil, Volatile Organic Compounds out of soil. The U.S. EPA has identified it in their technical papers as a presumptive remedy, saying if you've got VOCs in soil, you pretty much know -- this is going to do it for you.

Now, there are other alternatives that you look at in technology, but it really came down to, "This is proven. It will work. It is right for your site. It's a no-brainer. Get to it."

This is the basic schematic. It's in the Proposed Plan, on how soil vapor extraction works. Basically when you put in wells that have perforations in the casings, you put a vacuum on it and it pulls any

air in the contaminated zone from the soil, through the holes in the soil, and pulls it up. And it is put through a treatment system, usually carbon. And then the off gas is clean. And if the carbon builds up with contamination on it, it gets recharged. It is disposed of or recharged at a permitted facility.

It's a very simple system, different than pumping groundwater, where you've got the weight of groundwater pulling up 110 feet, cleaning it and putting it somewhere. So it's very effective.

Next. The Proposed Plan. Back in 1997 is where we initially said, "We've got a proposed action and it's soil vapor extraction." And we met with the public in May, a few years ago.

And go to the next one. We had a public comment period, and we resolved and signed an interim ROD. It was interim because it didn't address the entire site. The media groundwater was still hanging out there being resolved by the Navy, the agencies and the local water districts. We did address the public comments at that time, and we finalized and signed the document. At the point of being interim, we did not have an established final action level saying, "If we got to this point in the soil, we will be done." We let that -- that was an issue that was hanging out there,

and since it was interim, the Navy said, "We still want to start." The agency says, "We still want you to start." And everyone else in the community said, "It would be nice if you started."

And without having that issue resolved, the Navy went ahead and said, "We will start the extraction program, not knowing exactly where we're going to stop, but it was worth us starting. We will come back once we're done and go to the public and go to the agency and say, 'We had an interim action. We started the extraction program, but we will come back and have another proposed plan saying, 'Hear ye, Hear ye, we think we're done. We've done the action and we will come back and tell the public and get it blessed and say, 'You have met your action criteria. There is no risk. We can close this portion of the site.'"

Again, this is just the soils. So that's what the interim action did.

There were some objectives, basically what is our action going to do? Basically going to make sure the soil is risk free. Maybe not risk free, but risk was reduced for human health. And for the environment we would not have that soil contaminating the groundwater above drinking water standards. So if we remove that source out of the soil, the groundwater can

be attacked in a different mode, but it is not contributing to the groundwater contamination. Basically what our goals were.

So right now that kind of brings us back -- it didn't do anything new, it did what we had been doing the last couple of years. The Proposed Plan from this point on is: We have done that and Jeff is going to come up and take it from here.

We have Jeff doing this, because -- well, because he's good. He has worked on Norton Air Force Base. That basically was, I don't know, kind of a sister project that we really didn't know about -- but they pretty much had the same concerns and issues about what the VOC source area down at El Toro did. And they had, just in the few years before El Toro, addressed the same concern. John Broderick was the Water Board Rep on Norton. He said, "You know, Norton just went through what you guys pretty much are planning to do. And you might want to look at theirs, because they have already designed the system, they already built it and maybe you can have it."

So we basically went to Norton, visited their coordinator, talked to them. And their site conditions were very similar to ours and, vice versa, ours was similar to theirs. And they had already gone through a

lot of pain, agony and cost. And so El Toro decided at that time, "We can save a lot of money. We can save a lot of time. Let's go take their project equipment. It's already been done. It's close enough to our concerns and our needs, let's pull it over and have that company who pulled that together come to El Toro and do what they did so well at Norton."

So let me get my stuff out of the way.

Jeff, I will let you take over.

MR. JEFF STANEK: Thanks, Andy.

My name is Jeff Stanek, I'm a hydrogeologist with Earth Tech, and I was very involved in the cleanup at Norton. And I was fortunate enough to translate that into involvement at Site 24. Both of them, as you will see, directly related to Site 24. You will see what a success it really was.

The initial design of the system at Site 24 began in 1998. And there was a further refinement of that design that was in a published document known as the System Evaluation and Optimization Report. And that was issued in May of 1999. And this report essentially is the final design document for the Site 24 soil remediation. And this report optimized the design using additional pilot test data. And very important, it reevaluated the cleanup goals that were specified in the

interim ROD, and concluded they were indeed protective of groundwater quality.

And then the final well locations and screen depths were determined and the strategy for the cleanup, system shutdown and confirmation sampling was also provided in that report.

Here's a picture of the treatment equipment -- extraction and treatment equipment. This is when it was actually at Norton Air Force Base. You have got extraction equipment here, some very large vacuum blowers. Some moisture separators and some noise abatement devices. Some rather large conveyance piping. And here are the treatment units that are comprised of carbon filters. Each one of these held 20,000 pounds of carbon.

Here's another close-up picture of the system. This is the extraction blowers and the moisture separators.

This is another angle of the equipment, for your enjoyment.

The system, once the final design was completed and implemented at Site 24, involved the use of 96 SVE wells that were installed to depths of 110 feet, which is where groundwater was located at Site 24. So that's quite a few wells.

It also involved 7300 feet of linear -- 7300 linear feet of conveyance piping from the wells to the treatment compound. The average flow rate during the SVE operation was 900 standard cubic feet per minute. As I stated earlier, the vapor treatment was with activated carbon. And SVE was actively performed from May '99 to January 2000. And the total mass of VOCs removed was approximately 2,000 pounds.

By January of 2000, all of the vapor concentrations were below the cleanup goals. Just prior to that in December of '99, we had realized we were at that point of cleanup. And in order to just verify that we had removed as must mass as we technically and economically could, we did some very high resolution vertical profiling of concentrations with depth.

Although we were well below all the cleanup levels, there were still some residual concentrations, and we just wanted to identify where they were. And this vertical profiling confirmed that most of the residual VOCs were coming from groundwater. They were mostly detected in the deep vapor wells right at the interface with groundwater. There was no longer a source going from the soil to the groundwater. The concentrations that we were detecting were not from the ground --

MR. DON ZWEIFEL: Jeff, can I ask you something, you say high resolution, I'm presuming you are referring to a camera or something?

MR. JEFF STANEK: No. There's a device -- there's one proprietary device known as new log and that's what we used. You lower it into a well and it actually will record VOC concentrations with depth. And you have a discreet profile throughout the entire.

MR. DON ZWEIFEL: Well, is it a sensor of some type? It's not a video?

MR. JEFF STANEK: No, it's not a video. You wouldn't be able to see the VOCs. It's actually a measurement device that quantifies the total VOCs in that well with respect to depth. So when I say "high resolution," it's throughout the entire well screen. So you have a graphical depiction of where the VOCs are coming from a well.

MR. DON ZWEIFEL: I can't imagine -- if it's proprietary, you can't tell me what it is? I'm fascinated with this device. I guess it's new.

MR. JEFF STANEK: It's probably ten years?

MR. DON ZWEIFEL: Can you describe this device? If it's not video, I can't imagine what it might be.

MR. ANDY PISZKIN: Can we discuss that later?

In essence, you put this probe or this

instrument that measures, you lower it very slowly into the well, and every gradation it will sniff or it will detect what the concentration of gas that would be in the formation right at that discreet level.

So when he says "high resolution," it's not every ten feet. It takes a reading, it's continuous. So you can kind of see if there is anything coming out of the formation.

Does that help? I can show you a picture.

MR. DON ZWEIFEL: I'm fascinated with it.

MR. JEFF STANEK: After you reach your cleanup goals, the way to confirm that you've removed the sources is to shut down the system and if there is any appreciable mass that is left in the soil, your concentrations will increase or rebound.

If there is not an appreciable source still present in the soil, your concentrations will have minimal increase or rebound. And that's exactly what we saw. It was very minimal rebound, confirming that we had, in fact, removed the source in the soil.

And this was all documented in a closure report that was issued in June of 2002 and concurred on by the regulatory agencies.

These are the -- this table shows the concentrations, the maximum concentrations of the

various VOCs before cleanup, after cleanup in column three. The middle column shows the cleanup goals. And you will see the post-cleanup concentrations are substantially lower than the cleanup goals. I would also like to emphasize just how much -- just how substantial the decrease in concentrations from before cleanup to post-cleanup is.

If you look, just for example, TCE, it's less than 1 percent of the pre-cleanup concentrations. And that's about as good as it gets. So it confirms that SVE is obviously the way to go.

This shows some typical SVE declining curves. Some various wells at Site 24. And these are pretty typical of SVE, get some quick decrease in concentration which is an asymptotic. And what is important on these curves is you will see after the shutdown period or the rebound period there is no increase in concentration. Again, confirming source removed. Continuing with the remedy completion.

MR. DON ZWEIFEL: Looks like you have three wells here 24SVE45, 49 and 67. Is that right?

MR. JEFF STANEK: Yes.

Somehow we're not able to show you slide No. 22. It is in your handout. And this really bottom lines the remedy completion. Essentially cleanup of

the -- based on the confirmation sampling, the vertical profiling, the cleanup of Site 24 has been completed in accordance with the 1997 Interim ROD.

The VOCs have been reduced to levels that are protective of groundwater quality. We had known from the RI the VOCs did not pose a huge risk to human health even before cleanup. And that the Remedial Action Objectives specified in the Interim ROD have been attained. And therefore No Further Action is necessary for Site 24.

MR. PETER HERSH: May I ask you, Jeff, looking at the glossary I don't see a definition of RAO.

MR. JEFF STANEK: Remedial Action Objectives. And Andy had spoken about those just slightly previous to when I came up. And I can tell you which slide. Slide 13.

Now, typically once you finish the cleanup, you document that in a closure report and you're done. However, since the ROD was interim, we're going back and we're going to redo, or do a Proposed Plan that will specify No Further Action for Site 24 soil.

This Proposed Plan was made available to the public on July 14th and was concurred with by the FFA signators. The proposed plan invites public participation during the public comment period that runs

from July 14th through August 12th. And obviously includes this public meeting.

MR. DON ZWEIFEL: Jeff, may I say something? You know I am the co-chair of the Restoration Advisory Board for Tustin and I -- you know, I'm must say, Andy, I want to say that it's fine to say NFA, but you are going to have to have monitoring wells -- I used to be very active in this RAB years ago, and I thought we agreed we would have monitoring wells, and not just three monitoring wells of course. I guess the question is, "How many monitoring wells did we have?" Because we want to be sure that you have enough monitoring wells to determine -- we're concerned about Site 24, because we really don't know what is in there. You agree -- I don't care --

THE REPORTER: I cannot hear him.

MR. DON ZWEIFEL: The thing that I'm concerned about is that we don't know what is in there. And, therefore, you better have enough monitoring wells to determine precisely what is in there.

MR. JEFF STANEK: There were 96 wells.

MR. DON ZWEIFEL: 96 wells. It's not the number of wells, it's where these wells are placed and if the wells are placed downgraded, that's fine, but I guess -- that's fine I guess. The question is, what -- does

everything -- are we all -- are we all in (unintelligible).

THE REPORTER: I just can't hear him.

MR. ANDY PISZKIN: As Jeff just pointed out, the slide before that -- I'm sorry, maybe the next one up. The table.

Don, this is where we say the Navy proposes that we are complete with this site and we have concurrence from your state and federal agencies. This is where the concentrations were, the first column. This is what the Navy and the agencies as an interim level said is safe. If you reach those, at least the Navy said, we think by the math and the physics, that it will be protective of the groundwater.

The chart that was just up shows that we got pretty much less than half of those concentrations throughout the area. And so there's -- especially with the no rebound, we let this system set to see if anything else would dissipate or bled out into the formation or out from the formation. Nothing did.

MR. DON ZWEIFEL: How long did you wait? Because a rebound --

MR. JEFF STANEK: Seven months.

MR. DON ZWEIFEL: Because precipitation -- we had a heck of a lot of rainfall and -- usually that would

cause rebound if there's going to be a rebound.

MR. JEFF STANEK: Typical rebound periods are 30 to 90 days and we gave it seven months.

MR. DON ZWEIFEL: What did you allow in the seven-month period? Did that include the time when we got that tremendous rainfall?

MR. ANDY PISZKIN: I'm not sure what tremendous rainfall you are talking about.

MR. DON ZWEIFEL: We had --

MR. ANDY PISZKIN: This is in 2000. It's not like this last one. This is five years ago.

MR. DON ZWEIFEL: Oh.

MR. ANDY PISZKIN: And so we gave this plenty of time, plenty evaluation to say this site is not causing any contamination or migration of contaminates into the groundwater.

MR. DON ZWEIFEL: When was the last time you ran some tests to determine whether there had been a rebound? It hasn't been since 2000, surely you hadn't, been monitoring test wells -- testing since then.

MR. ANDY PISZKIN: Are you talking about monitoring wells for groundwater or the soil vapor? This is about the soils at Site 24. The groundwater is being resolved or discussed and -- actually it's in construction now for the remediation of the groundwater. This is the

soils only, Don. Does that help?

UNKNOWN SPEAKER: This is a monstrous system, 7,000 linear feet of piping, you pull out 2,000 pounds of the VOCs in nine months between 1999 and 2000. Where is this system going when it's not here? Is it going to go back on base and back to Norton -- (unintelligible.)

THE REPORTER: I cannot hear this speaker. I cannot hear.

MR. ANDY PISZKIN: The Navy retains ownership of this. And it has not been decided what will be the fate of this system.

UNKNOWN SPEAKER: Can we stick it in a hangar someplace and tell the Navy we -- (unintelligible).

THE REPORTER: I cannot hear. I can't hear.

MR. ANDY PISZKIN: Who is "we"? It is government property.

UNKNOWN SPEAKER: You can always auction it off.

MR. ANDY PISZKIN: Let's finish it up a little bit and then we can have more of a discussion and then we can have some kind of formal comment period.

UNKNOWN SPEAKER: (Unintelligible.)

THE REPORTER: I can't hear you.

MR. ANDY PISZKIN: We appreciate the Air Force for doing that.

UNKNOWN SPEAKER: The Air Force?

MR. ANDY PISZKIN: Yes.

UNKNOWN SPEAKER: No charge?

MR. ANDY PISZKIN: No charge. It did cost something to dismantle it, refurbish it and reconstruct it at El Toro.

UNKNOWN SPEAKER: You need to speak up, she can't hear you.

THE REPORTER: I am having a hard time hearing anybody at that end.

UNKNOWN SPEAKER: The Navy just said they're going to give it to the Val Holsen's (phonetic.)

MR. ANDY PISZKIN: The Navy did not say that, for the record.

Let's continue. Okay.

MR. JEFF STANEK: Following the Proposed Plan will be the final ROD for the Site 24 soil. And it will include responses to the public comments on the Proposed Plan, including any comments or questions from tonight's public hearing.

It will formally document the attainment of remedial action objectives and No Further Action of Site 24 soil. Once it's finalized, it will be signed by the FFA signators. And it's scheduled for completion in November of 2005.

MR. ANDY PISZKIN: Submittal comments.

Thank you very much, Jeff.

UNKNOWN SPEAKER: Do you have a standard to work with for groundwater?

MR. ANDY PISZKIN: Yes, drinking water standard.

UNKNOWN SPEAKER: What?

MR. ANDY PISZKIN: Drinking water standard.

UNKNOWN SPEAKER: Because that groundwater changes all the time in Industry, all the way from Norton clear down to here, there are all kinds of plants and all of them are dumping their waste into the ground, so the water is not always the same.

MR. ANDY PISZKIN: We're not downgradient it from Riverside.

UNKNOWN SPEAKER:

MR. BRUCE F. BAUER: I know, but I work in Long Beach where we were using Artisan water for a while and got too much oil in the local oil wells and could not use Artisan water anymore.

MR. ANDY PISZKIN: El Toro is not downgradient of Long Beach. We've evaluated the groundwater at El Toro substantially. Orange County Water District says evaluated the groundwater in this whole region, the sub-basin extensively. Irvine Branch Water District also has -- this is the VOC source area that had contaminated groundwater under El Toro.

You are correct, there is a lot of groundwater issues in the country and in Southern California. The ones you're talking about don't relate to El Toro's concerns tonight, but I appreciate the comment.

Peter, I'm going to tell you how we can submit comments officially. You can fax them to me. You can e-mail them to me. I'm sorry, e-mail them to Content Arnold. You can fill out this form. You can talk to Laura, the court reporter. Written comments need to be in, pretty much postmarked, no later than the 12th of August.

MR. BOB COLEMAN: What I wanted to suggest was, if you have a comment, to please state your name, spell it out and the city you live in, so Laura can get that on the record.

If you have already done so, made a comment, please make sure that you go over there and tell her your name, spell it out and the city you live in. Thanks.

MR. ANDY PISZKIN: Okay. So I would like to open up for -- I know we're running a little late, but it's been a good meeting so far. I'm going to take Peter first.

MR. PETER HERSH: I would like to pick up a little bit at, you're looking at an interim ROD having an issue, we concluded this process back in January of

2000, it's now five years later.

I guess my comment would be something to the effect, we have in slides Nos. 19 and 20 -- if we can confirm that the maximum of post-cleanup concentrations have not changed over time, I think that would help in my comfort level. And I don't know if that's where Don was doing on his comment, but the five years have passed, maybe nothing has changed, maybe the cleanup is fully completed, but I think that would help the conclusion that we're not being asked to support a ROD, and I think it's valid. But if there is something that could be done and responded to to help our comfort level based on your experience and maybe the experience at Norton that there is little or no likelihood that these levels will go up.

That's my comment.

MR. ANDY PISZKIN: Peter, can you state and spell your name and where you're from.

MR. PETER HERSH: I'm sorry. It's Peter Hersh, H-e-r-s-h. I live in the City of Laugna Niguel and I am a RAB member.

MR. ANDY PISZKIN: Thank you.

MR. GREG HURLEY: Greg Hurley, City of Laguna Beach, RAB member. Can you summarize the undersoil of VOC actions that are happening?

MR. ANDY PISZKIN: I'm not going to do that at this meeting, because this is focused on the soil.

Don.

MR. DON ZWEIFEL: Name is Don Zweifel, Placentia.

MR. ANDY PISZKIN: Spell it.

MR. DON ZWEIFEL: Z-w-e-i-f-e-l.

You know, I must admit that this sounds well good on the surface, however, the thing is, you know, what Andy is saying, "Well, there hasn't been a rebound yet. We only looked at it on a narrow window for seven months of opportunity." I am saying, "Wait a minute." You know, I remember some comments from the employees at MCAS El Toro that told me they buried barrels of contaminants. And why did they do it? I don't know if that's important right now. I can tell you later about why they did it -- but actually it had to do with the -- if it was a half-filled barrel of PCE, they had to remove that barrel because they wouldn't get a full barrel or -- barrels of PCE is vital for cleaning aircraft, they had to have it. The thing is, I'm saying, there are probably barrels buried down here and they are sealed and they are coated, but the thing is, eventually you've got to face it, those barrels are going to leak. They will leak. Maybe they haven't leaked yet, but they eventually will leak.

We really don't know -- you say, "Oh, we're going to have a site characterization." You have never done a site characterization. You can't. You're not a magician.

There is no way you can determine that -- you cannot do a characterization of that site. I'm sorry, you can't do it. I mean we would love to, I wish you could, but I know that there are barrels down there. I don't know how many and I know that employees -- Miller Jackson, he was in charge with the physical plant at El Toro years ago, and he said that he knows what they did. When the MG inspection was about to come, they buried -- he didn't say where. I don't know if he is alive anymore. I talked to him ten years ago about this.

And remember, Andy, I told you about this. And, Content, I already mentioned it to her, most of you guys know. I am just reiterating an old song.

The thing is, ladies and gentlemen, this is a great concern to me. What is going to happen to those barrels? Right now it appears everything is okay, but the thing is, I think those barrels will eventually leak. And I don't know how many of them there are, but I am almost sure there are some barrels there.

So what I am proposing, if I may, is that continued monitoring of Site 24 on the periphery,

downgradient mind you, for, I don't know, maybe, five, ten, 15, 20 years maybe. Because it will take a while for those barrels to leak, especially if they are coated. And most of the barrels were. And you may say, "Well, how long is it going to take to erode a steel barrel?" Who knows. It's hard to say. But I'm saying that eventually those barrels will leak.

We tentatively or at least potentially think they are there, that's why I'm proposing -- I'm sorry, you're going to have to monitor this site for years and years to come to make sure that those barrels, that are probably there, don't leak. And if they do leak, then you're going to have to come back and -- see I'm worried about the City of Irvine and Lennar and -- because you're going -- I mean restrictive covenants on this site, until you can guarantee that. If you want to sign off on this and say, "There is not going to be any more contamination from this site. You can go ahead." Well, that's great, but your neck should be on the line. And if they find that these barrels have leaked, if they are truly there, well, then you are going to have to come back, the Navy is going to have to come back and solve that problem. And you're going to have to promise that -- the Department of the Navy is going to have to promise us that they are not going to leak. And if they

do, you are going to have to come back and remediate.

MR. ANDY PISZKIN: So your comment is the Navy should do long-term monitoring downgrading of Site 24?

MR. DON ZWEIFEL: That's all. I know there is going to be some cost involved, but hopefully it wouldn't be too consequential.

MR. ANDY PISZKIN: Any more questions or comments?

MR. GREG HURLEY: Greg Hurley, H-u-r-l-e-y, RAB member.

Don's comment reminded me of the late Dr. Chuck Bennett's concern years ago, that the source area of the groundwater of VOCs was not Site 24, it was actually much more dispersed in general. There is no evidence of that, but just a comment, I believe going back for the ten plus years we've been here, that maybe Site 24 isn't the source area; notwithstanding that we have the desalter in place with groundwater controls. But the reality, I think what Don is saying, if I am paraphrasing it, is there is probably other contaminated soil out there and Site 24 isn't the end of it. And not withstanding the fact they're are still open to mediation, I don't know if there is any investigations.

MR. ANDY PISZKIN: Okay. Thank you.

Larry.

MR. LARRY LAVEN: Well, this soil --

MR. ANDY PISZKIN: State your name and spell it.

MR. LARRY LAVEN: Oh, sorry.

My name is Larry Laven and I'm from Anaheim.

MR. ANDY PISZKIN: Spell your last name.

MR. LARRY LAVEN: All right. L-a-v-e-n.

MR. ANDY PISZKIN: Thank you.

MR. LARRY LAVEN: And if the soil vapor extraction works so well in the soil, how come they don't just pump up the water, let it run down into the soil and use it to clean the water as it seeps through the soil, if it works so well? It's going to take, what, 60 years, 50 years to clean this water? And you say that to get this stuff out of the soil is a cinch, compared to getting it out of the water. So why don't they just pump it up, let it go down through the soil and extract it?

MR. ANDY PISZKIN: Okay. Thank you.

Any other comments or questions?

MR. DON ZWEIFEL: Andy, just one question.

MR. ANDY PISZKIN: You're not up.

MR. ROY HERNDON: Procedural question, it's really not a comment.

MR. ANDY PISZKIN: Who are you?

MR. ROY HERNDON: Roy Herndon, Orange County Water District.

I am just curious why three years between the time of the Closure Report acceptance by the regulatory agencies and actually finally going through this No Further Action. It seems like three years is a long time. You pretty much have the Closure Report accepted. Is there procedural reasons for that? Seems like you knew what you wanted to do three years ago. I'm surprised we didn't get through this sooner than that. I am sure you had your priorities, but I'm just curious.

MR. ANDY PISZKIN: Good question. We'll answer that.

I'm hearing from the staff and the consultants it was an interim ROD. Part of the discussion I know early was we're done, we have a Closure Report, everyone concurs upon it. Do we -- is an explanation of significant differences a way to close out the record decision? Is that enough protocol to say "We're done"? We have all your representatives' support and concurrence. Is that acceptable? No, let's make sure we go beyond that. We had record of decision. We did more than what we expected to do and we can just put a public notice out saying, "Here. You are done." We wanted to go beyond that. So there was a little bit of a discussion of, there is no immediate need to say hurry, we're done. And so there is a little bit of

interim discussion done amongst us and the regulatory agencies. Actually the representative of EPA at the time, Nicole Moutoux, she suggested, "No, don't do an explanation of significant differences for the ROD, to make it from interim to final. This is a success story. You should actually go back out and say, 'There was a concern, it was fully addressed, better than expected.' And go out and say, 'Let's close this success story out. And let's do it as the highest level of formality under the law.'"

And so it wasn't an immediate need to basically document what we have done. We did have concurrence on the close-out reports and it just took a little time to, you know, get our resources back and address them. That's probably more of what really happened.

Any other comments, questions?

Well, if that's it, there is a meeting evaluation. If anybody would like to fill that out, we would appreciate it.

And if someone still has comments on a form or on a card or still wants to sit down with the court reporter, we will keep it open for a while. We will even defer or delay our Restoration Advisory Board start, if there are some comments that we need the court reporter.

So we are here to take your opinions. If you do have a comment or question, please get to it. Just say, Here is what my comment or concern or my question is, versus a dissertation, if you can.

So -- Don, is this another question?

MR. DON ZWEIFEL: Yes. I would like to ask that I receive -- if it's possible, I would like to receive a response from Brigadiers in regards to my comments, if that's possible, and from Southwest Division, if you could. If you would like to -- I think the regulators, I would love to hear what they say, and the Water Quality Control Board, and the DTSC (unintelligible).

MR. ANDY PISZKIN: There is a handout that I showed before you got here, Don, of the points of contact for El Toro that also includes your state and federal representatives, as well as we get some more information on information that we presented here.

The record of decision will be written next and it will include a responsiveness summary that will have a response to pertinent comments associated with this site and the questions that will have been asked tonight as well as whatever is submitted to me or the Navy prior to the cutoff, August 12th.

So you can also -- behind you is the state and federal representatives, but you can also get their

phone number or address from this document on the table.

MR. DON ZWEIFEL: I want to say one thing about the aquifer. Assume, everybody assumes, Oh "the aquifer is impermeable." Well, I just don't think it is. It may be mostly, but one cannot say beyond a shadow of a doubt that the aquifer is absolutely impermeable. You know what I'm referring to, the principal aquifer could conceivably be impacted. One could say theoretically the aquifer should work, it will provide an interface, it will be, you know, completely impermeable.

You can't say that, can you?

MR. ANDY PISZKIN: Larry, you had another question?

MR. LARRY LAVEN: When he was talking about that probe, I was thinking what is most important is that when they -- you had a chart up there earlier that showed the preconditions when it was contaminated and then the acceptable levels. And then they showed -- yeah, that chart there -- and when they took the test that showed the Trichloroethene and the Tetrachloroethene at the 6,120 level and 192 level, that they use the same tests or probe going down through, I guess, a well. But if they got those numbers with a different test, it's really irrelevant to show progress, because the tests were not the same.

MR. ANDY PISZKIN: Jeff, can you?

MR. JEFF STANEK: The sampling methods were consistent. The probe that you are referring to was used as a diagnostic tool to indicate that we had, in fact, reached our cleanup goals.

Now, these results here are not based on that diagnostic tool. The probe that was lowered in the hole would get total VOCs. These results shown on the graph here were laboratory analyses, very comprehensive laboratory analyses, so that all of the pre- and post-clean up concentrations you see up there were evaluated in a consistent manner.

MR. ANDY PISZKIN: Thank you.

MR. LARRY LAVEN: But the probe makes you think that the vapors come out of the site of the dirt, which doesn't make sense because the VOCs are heavy and they go straight down. They shouldn't really go to the site into a well that is designed to draw water up.

And I have another comment.

MR. ANDY PISZKIN: You want that open or can you provide that to the court reporter afterwards? I want to kind of close up.

MR. LARRY LAVEN: Well, it's quick.

Then the picture that you showed of the wells, and it showed the direction of the VOCs going through the piping, technically doesn't work for the same reason

that when you fill up a gas can with gas, you try and put it in your tank, it don't come out of that gas can until you take that other little cap off, so that the air can go through the can. Your picture there doesn't show a pipe going down to let air in, you just figure it's coming from the surface.

MR. ANDY PISZKIN: Actually the surface of the ground is not sealed like a gas can, so air can come from outside of the contaminated area and travel from the surface or from a clean area and go through the contaminate area and up and be treated.

So it's not like a closed gas can.

This will be the last comment or question.

MR. GREG HURLEY: I will be short.

Does the Site 24 soil automatically get dropped in the Voss (phonetic) property and transferred without restrictions?

MR. ANDY PISZKIN: The property at El Toro is transferred not in layers. It is transferred pretty much all the way through. So even though -- if you would put up the slide, probably the first site description.

As you notice the investigation area of Site 24 is this location. This shaded part beneath it is a depiction of the contaminated groundwater.

As an example, if the soil is deemed remedied to the levels required by law, then the soil would be released from its restrictions.

However, property that may be clean above the plume would not be transferable, because the contamination of the groundwater is not at a finest suitability to transfer level.

Does that answer your question?

MR. GREG HURLEY: So Site 24 at the site of this ROD will stay in Navy hands or will transfer?

MR. ANDY PISZKIN: As the depiction on this chart, this portion over here that does not have contamination below the soil, that would be transferable.

This portion that has an environmental media of concern that has not been released by the regulatory agencies, would not be transferable.

MR. GREG HURLEY: So there is further regulatory action before this transfers then?

MR. ANDY PISZKIN: Before anything associated with the property in the column that still requires investigation and/or remediation.

MR. GREG HURLEY: Okay.

MR. DON ZWEIFEL: Percentages of what will not be transferred roughly?

MR. ANDY PISZKIN: I don't know.

MR. DON ZWEIFEL: Quarter of it or something?

MR. ANDY PISZKIN: There may be an area that is not necessarily just the groundwater. If there's an underground storage tank that is also within the investigation area of Site 24 that has not been addressed, that portion of that same overlapping area would not be transferable until all remedial actions or investigations for that specific concern have been addressed.

So it's difficult for me to say what would happen, because this map is only depicting the soil investigation area as well as related groundwater contamination.

MR. DON ZWEIFEL: So you are saying that Lennar really can't build or if they do build there are going to be deed restrictions?

MR. ANDY PISZKIN: I'm not saying that.

MR. DON ZWEIFEL: If there is going to be deed restrictions until that you a -- all of Site 24 is remediated. Isn't that true? Sure there has to be --

MR. ANDY PISZKIN: No.

MR. DON ZWEIFEL: Why not? How can you have -- how can you transfer land that's contaminated? You can't do that.

MR. ANDY PISZKIN: This is a little off of what this

project is associated with; however, it's pertinent to this discussion and is -- I can answer it.

This groundwater that is contaminated because of the VOC source, VOC contaminated soil migrated into the groundwater, that groundwater can have a remedial action in place. For instance, we're constructing an extraction system for the groundwater, to remediate the groundwater. If it has been determined by the U.S. EPA that that system is operating properly and successfully, there and then that property associated with that contamination can be transferred even prior to it being remediated to the final extent.

So property can be transferred that is still -- that still requires remedial action.

MR. DON ZWEIFEL: There will be deed restrictions?

MR. ANDY PISZKIN: That wasn't initially your question. There is a difference between -- it doesn't all have to be remediated to its final No Further Action status prior to being able to be -- able to be transferred.

MR. DON ZWEIFEL: I want you to admit there will be deed restrictions.

MR. ANDY PISZKIN: There will be restrictions associated with property that has been transferred that still requires Navy action, because the use of the

property cannot interfere with the Navy's continued investigation, monitoring or remediation of our contamination is concerned. So, yes, there would be restrictions. It does not preclude possibly some level --

MR. DON ZWEIFEL: You mean -- certainly not --

THE REPORTER: I cannot hear you.

MR. DON ZWEIFEL: -- we can talk about dirty (unintelligible) -- that factors into the equation --

MR. ANDY PISZKIN: If it is associated with dirt, it wouldn't be associated with groundwater.

MR. DON ZWEIFEL: Right.

MR. ANDY PISZKIN: Again, if you have a meeting evaluation, please fill it out. If you do have any comments, hopefully short as can be, we will have Laura stay here for a while and we will kind of defer the start of our Restoration Advisory Board meeting.

I appreciate everyone's attendance. The Navy does appreciate your participation, your input, your comments. And this meeting is officially adjourned.

Thank you.

(The meeting was adjourned at 7:54 p.m.)

COUNTY OF SAN DIEGO)

ss.)

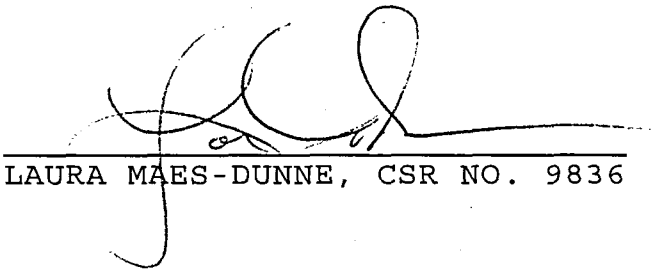
STATE OF CALIFORNIA)

I, Laura Maes-Dunne, a Certified Shorthand Reporter for the State of California, do hereby certify:

The foregoing Public Meeting was taken before me at the time and place set forth herein; that said Public Meeting was reported by me in shorthand and was later transcribed under my direction into print by means of computer-assisted transcription, and the foregoing pages are a full, true and correct record of the meeting adduced at the aforementioned time and place.

And I further certify that I am a disinterested person and am in no way interested in the outcome of said action, or connected with or related to any of the parties in said action.

IN WITNESS WHEREOF, I have subscribed my hand this 1st day of August, 2005.



LAURA MAES-DUNNE, CSR NO. 9836

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MULTI-MEDIA ENVIRONMENTAL COMPLIANCE CONTRACT TRANSMITTAL MEMORANDUM

Contract No. N-68711-00-D-0004 **File Code:** 126463-002/2.8

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Dept. of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

Attention: Gracy Tinker

DATE: 11/29/05
D.O. # 0069
LOCATION: MCAS El Toro

FROM: Bob Coleman
Project Manager

DESCRIPTION: MCAS El Toro Public Meeting Transcript for the Proposed Plan for No Further Action Operable Unit 2A, Site 24 VOC Source Area, 7/27/05, Public Meeting

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